

Notes on Cerambycidae with Descriptions of New Species (Coleop.).

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The following new forms and notes have accumulated, and
are presented herewith.

PARAOPSIMUS New Genus.

Head slightly impressed between antennae, mandibles with
tooth near apex, eyes divided, antennae extending beyond apices
of elytra, scape reaching little beyond front margin of pro-
thorax. Thorax widest in middle, with a lateral, acute, turned-
up tubercle just back of middle, another near base on each side,
hind margin emarginate in the arc of a circle, emargination
filled with thin corneous plate. Elytra wider than thorax at
base, sides nearly parallel, rounding in apical third to separately
rounded apices. Prosternum extremely narrow between front
coxae, femora clavate, first joint of hind tarsus longer than fol-
lowing joints united.

Genotype *Paraopsimus bidentatus* new species.

This genus is proposed for a species which does not fit either
Opsimus Thoms. or *Dicentrus* Lec. It differs from *Opsimus*
Thoms. by having two lateral spines on the thorax, and from
Dicentrus Lec. by the clavate femora, length of antennal joints
and antennae, the first joint not being as long as the two follow-
ing joints.

This genus should be placed in the *Saphanini* between *Opsi-
mus* Thoms. and *Dicentrus* Lec.

Paraopsimus bidentatus new species.

Bruneous above and below, ochraceous pubescence sparse,
ventral surface shining, nearly void of pubescence. Head
sparsely punctate on front, vertex slightly rugose, punctures
sparse; antennae reaching beyond the end of elytra in female,
second joint shorter than third, third and fourth joints about
equal in length, fifth longer, following joints decreasing in
length.

Thorax wider than long, convex constricted at apex and at
base, sides widened to back of middle, strongly constricted to

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base, tubercles as stated above, surface granulate, center slightly depressed, transverse depression at base. Scutellum as wide as long, rounded posteriorly. Elytra with sides nearly parallel, rounding in apical third to separately rounded apices, surface finely granulate, two faint costae on each elytron, surface sparsely covered with very fine ochraceous pubescence, longer hairs irregularly placed. Ventral surface of thorax slightly transversely strigose, abdomen sparsely punctate. Length 12.5 mm.; width 2.5 mm.

Type a female in authors' collection, labeled Subalpine Region, A. L. Lovett, and probably from the State of Oregon.

Strangalia abdominalis Hald.—This species was reared from the sapwood of a dead standing bald cypress (*Taxodium distichum*) collected at Cape Henry, Virginia.

Leptostylus bahamicus Fisher—Adults of this recently described West Indian species were collected at Paradise Key, Florida, April 4 and April 10. (Determinations through the kindness of Mr. W. S. Fisher.)

***Ataxia brunneus* new species.**

Resembling *Ataxia hubbardi* Fisher in size and form, covered above and below with recumbent ochraceous pubescence, intermixed with cinereous on ventral surface, semi-erect hairs arising from the irregular punctures.

Head coarsely punctured, concave between antennae tubercles, eyes coarsely granulate, antennae not extending to end of elytra in female, annulated, cinereous recumbent pubescence on all but first two joints, long hairs scattered irregularly over joints, first joint with slight trace of cicatrix at apex.

Thorax wider than long, widest at base, constricted anteriorly, sides arcuate from base to apex, an acute tubercle in middle on each side, disk irregularly densely punctured. Scutellum triangular, rounded posteriorly. Elytra about two and one-half times as long as wide, wider than thorax at base, sides nearly parallel, rounded anteriorly to separately rounded apices, disk irregularly deeply punctured, punctures larger and more numerous toward base. Mesosternum with groove more prominent posteriorly.

Abdomen irregularly lightly punctured, last ventral truncate at tip, broad concave depression at apex, legs covered with cinereous and ochraceous pubescence. Length 12.5 mm.; width 4 mm.

Type a female labeled northern Illinois, in the collection of the authors.

This species resembles *Ataxia hubbardi* Fisher very closely, but can easily be separated by the punctures of the elytra being finer and by the color of the pubescence on the dorsal surface.

We are indebted to Mr. W. S. Fisher for comparing the specimen with the type of *Ataxia hubbardi* Fisher.

The "Ponderable" Substance of Aphids (Homop.).

By GLENN W. HERRICK, Cornell University, Ithaca, New York.

The number of species of living insects is very great. A late authority says that there are 470,000 species of insects now known and it is estimated that the total number now living is probably more than two millions. To visualize the number of known species it may suffice to say that if the mere names of these insects were printed in two columns to a page with 45 names in each column they would fill ten volumes of 500 pages each and there would be 20,000 names left over. This enormous number of living animals must find food and find it in abundance if they are to maintain themselves on the earth. A consideration, however, of the number, only, of species of insects on the earth does not convey the full significance of the real situation concerning these tiny animals and their relation to man. A fuller realization of the role of insects on the earth will be grasped when one considers the number of individuals that may arise in any one of the existing species.

Many years ago Huxley estimated that in the course of ten generations, supposing all of the individuals to survive, the progeny of a single aphid would "contain more ponderable substance than 500 millions of stout men; that is, more than the whole population of China." It has been of considerable interest in the light of some detailed investigations of the biology of certain aphids, especially the common cabbage aphid (*Brevicoryne brassicae*), to ponder a bit over this estimate of Huxley's.

In a study of the life cycle of the cabbage aphid the insect was carried through a period of slightly more than one year (Mar. 31, 1910, to Apr. 6, 1911) and, in that time was found